UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,709	08/07/2006	Daniel Hinterman	DC10010 PCT 1	4484
	7590 12/30/200 IG CORPORATION C	EXAMINER		
2200 W. SALZ P.O. BOX 994	BURG ROAD	KASSA, TIGABU		
MIDLAND, MI	I 48686-0994	ART UNIT	PAPER NUMBER	
			1619	
		NOTIFICATION DATE	DELIVERY MODE	
			12/30/2009	ELECTRONIC

### Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents.admin@dowcorning.com

		Application	ication No. Applicant(s)					
Office Action Summary		10/588,709		HINTERMAN, DANIEL				
		Examiner		Art Unit				
			TIGABU KAS	SSA	1619			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)☐ Responsiv	ve to communication(s) file	ed on						
2a) ☐ This action	• •		- <sup>.</sup> action is nor	ı-final				
<i>/</i> —		<i>,</i> —			secution as to the	a marite ie		
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Closed III E	decordance with the practi	cc andcr 2	n paric Quay	70, 1000 O.D. 11, 40	0.0.210.			
Disposition of Clair	ms							
4)☐ Claim(s) _	is/are pending in the	e application	ղ.					
4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
6)☐ Claim(s) _	is/are rejected.							
7)	is/are objected to.							
8)☐ Claim(s) _	are subject to restric	ction and/or	election req	uirement.				
Application Papers	-							
•	cation is objected to by th			_				
•	ig(s) filed on is/are	•	-	-				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
11) Ine oath o	r declaration is objected to	o by the Exa	aminer. Note	the attached Office	Action or form P	10-152.		
Priority under 35 U	.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
Attachment(s)								
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)								
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application								
Paper No(s)/Mail Date 6) Other:								

#### **DETAILED ACTION**

Claims 1-10 are pending. <u>Claims 1-10 are under consideration in the instant office</u> action.

#### Election/Restrictions

Upon further consideration by the examiner the restriction requirement mailed on 08/06/09 is hereby withdrawn. As a result, instant claims 1-10 are under consideration.

#### **Priority**

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

#### Information Disclosure Statement

The information disclosure statement (IDSs) submitted on 01/08/07 and 08/07/06 was noted and the submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the references.

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-6, and 8-10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Halloran et al (US Patent No. 5173290).

Application/Control Number: 10/588,709

Art Unit: 1619

Applicants claim a composition comprising a powder and an alkyl-phenyl silsesquioxane resin as the structure recited in the claim. The dependent claims thereof recite possible units that can be incorporated in the alkyl-phenyl silsesquioxane resin and additional components that can be added in the composition. Additionally, other dependent claims recite various products comprising the composition of claim 1.

Page 3

Halloran et al. disclose composition prepared into a three neck round bottom flask equipped with a stirrer and thermometer by placing 39.8 grams toluene and 14.4 grams isopropanol, which are organic solvents. To this was added 33.6 grams phenyltrichlorosilane and 12.2 grams propyltrichlorosilane. Water was added to hydrolyze the chlorosilanes in an amount to produce an aqueous phase containing 13-16 weight percent hydrochloric acid. This mixture was refluxed for four hours insuring continuous hydrolysis. The hydrolyzate was separated from the aqueous phase, the solvent was removed under vacuum, and the solid product was flaked. The product corresponded to a nonpolar silsesquioxane of the formula RSiO<sub>3/2</sub>. The examiner notes that applicants original specification disclose an example of the same reaction as described above in example 3, paragraph 0043, page 13 for the production of propyl-phenyl silsesquioxane, which is a species of the polymeric structure recited in instant claim 1. Based on the examiner's calculation in the example disclosed by Halloran et al. x = 12.2/45.8, which is 0.27, and y=33.6/45.8, which is 0.73. The overall structure of the product disclosed by Halloran et al. is as follows:

 $(CH_3CH_2CH_2SiO_{3/2})_{0.27}(C_6H_5SiO_{3/2})_{0.73}$ 

Additionally, Halloran et al. disclose the above described silsesquioxane was formulated into a hair fixative composition by mixing with ethanol (organic solvent) (column 5, lines 36-

Application/Control Number: 10/588,709

Page 4

Art Unit: 1619

37). Halloran et al. also disclose that powders (thickeners) such as sodium alginate, starch etc., are included in the composition (column 13, lines 11-16). The examiner takes the position that the limitations recited in instant claims 8-10 are intended use of the composition disclosed in claim 1. The examiner reminds applicant that while instant claims 8-10 do recite different intended use labels descriptive of the product being claimed, there are no further structural limitations present other than the composition of claim 1. Therefore, the only structural component apparently necessary to meet the requirement of the claims is the composition of claim 1. Therefore, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim limitations. The examiner notes that the composition disclosed by Halloran et al. is capable of being used in the various products recited in instant claims 8-10 since it is the same composition as the instantly claimed composition. The above teachings clearly anticipate the limitations of instant claims 1, 3-6, and 8-10.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness

Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halloran et al (US Patent No. 5173290) as applied to claims 1 and 3-6 above, and further in view of Schlosser (US 2004/0180011, IDS reference).

## Applicant Claims

The claimed subject matters of instant claims 1 and 6 are set forth above. Instant claim 2 recites the composition of claim 1 with possible units that can be incorporated in the alkylphenyl silsesquioxane resin. Instant claim 7 recites the cosmetic product of claim 6, wherein the cosmetic product is a lipstick or foundation.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The teachings of Halloran et al. are set forth above.

Application/Control Number: 10/588,709 Page 6

Art Unit: 1619

# Ascertainment of the Difference between Scope of the Prior Art and the Claims (MPEP §2141.012)

Although Halloran et al. clearly teach a personal care hair fixative composition comprising alkyl-phenyl silsesquioxane and powder, Halloran et al. do not explicitly teach lipstick or foundation cosmetic composition. Hallorn et al. also do not specifically teach that alkyl-phenyl silsesquioxane contains the units recited in instant claim 2. These deficiencies are cured by the teachings of Schlosser.

Schlosser teaches the use of  $C_{2-20}$  alkyl phenyl silsesquioxane resins in cosmetic formulations providing cosmetics with good feel and water resistance (abstract). Lipsticks having excellent transfer resistance and high gloss may be prepared (abstract). The silicone resins useful herein are silsesquioxane resins which bear phenyl and  $C_{2-20}$  alkyl groups (paragraph 0014). The preferred resins are those of the formula as follows (paragraph 0016

 $[RSiO_{3/2}]_a[R^1SiO_{3/2}]_b[R^2SiO_{3/2}]_c[R_3{}^3SiO_{1/2}]_d[R_2[{}^3SiO_{2/2}]_e[SiO_{4/2}]_f$ 

where R is methyl;  $R^1$  is  $C_{2-20}$  alkyl or  $C_{5-20}$  cycloalkyl, preferably,  $\underline{C_{3-8}}$  alkyl or  $C_{6-12}$  cycloalkyl;  $\underline{R^2}$  is phenyl,  $R^3$  is  $C_{1-20}$  alkyl,  $C_{5-20}$  cycloalkyl,  $C_{7-14}$  aralkyl,  $C_{7-14}$  alkaryl, or  $C_{6-10}$  aryl, preferably  $C_{1-8}$  alkyl,  $C_{6-12}$  cycloalkyl, or  $C_6$  aryl; and a, b, and c are such that their respective siloxy groups preferably comprise at least 90 mol percent of the total of groups a-f, and at least one  $R^1$  and at least one  $R^2$  is present (paragraph 0017). The examiner notes that the  $C_{2-20}$  alkyl phenyl silsesquioxane taught by Schlosser have the same units as the units recited in instant claim 2 except the amounts. The silsesquioxane resins bearing both phenyl and  $C_{2-20}$  alkyl groups may be formulated into liquid or semisolid cosmetic products which then offer excellent feel and high gloss, without sacrificing transfer resistance (paragraph 0010).

Art Unit: 1619

# Finding of Prima Facie Obviousness Rationale and Motivation (MPEP §2142-2143)

It would have been *prima facie* obvious to a person of ordinary skill in the art at the time of the instant invention to modify the teachings of Halloran et al. by incorporating the units recited in instant claim 2 in alkyl-phenyl silsesquioxane because Schlosser teaches similar units in a cosmetic composition. The skilled artisan would have been motivated to incorporate the units recited in instant claim 2 because they are conventionally known in the prior art as also evidenced by the instant specification paragraph 0018. The skilled artisan would have been motivated to incorporate the units recited in instant claim 2 because Schlosser teaches that the silsesquioxane resins bearing both phenyl and C<sub>2-20</sub> alkyl groups may be formulated into liquid or semisolid cosmetic products which then offer excellent feel and high gloss, without sacrificing transfer resistance (paragraph 0010). Similarly, a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). Furthermore, differences in concentration will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). The skilled artisan would have had a reasonable expectation of success in combining Halloran et al. and Schlosser because both teach similar compositions containing alkyl-phenyl silsesquioxane.

It would have been *prima facie* obvious to a person of ordinary skill in the art at the time of the instant invention was made to modify the teachings of Halloran et al. by making a lipstick or foundation cosmetics compositions because Schlosser teaches alkyl-phenyl silsesquioxane can be used for preparing lipstick and foundation compositions. The skilled artisan would have been motivated to prepare lipstick or foundation compositions containing alkyl-phenyl silsesquioxane because Schlosser teaches that lipsticks having excellent transfer resistance and high gloss may be prepared from compositions containing  $C_{2-20}$  alkyl phenyl silsesquioxane resins (abstract). The skilled artisan would have a reasonable expectation of success in combining Halloran et al. and Schlosser because both teach similar compositions containing alkyl-phenyl silsesquioxane.

In light of the forgoing discussion, one of ordinary skill in the art would have concluded that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

#### Conclusion

Claims 1-10 are rejected. No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIGABU KASSA whose telephone number is (571)270-5867. The examiner can normally be reached on 9 am-5 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne P. Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/588,709 Page 9

Art Unit: 1619

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tigabu Kassa /YVONNE L. EYLER/ 12/15/09

Supervisory Patent Examiner, Art Unit 1619